

	1	50
Arabidopsis	(1) --MHWIATRNAVVSFPKWR---FFFRSSYRTYSSLKPSSPILLNRRYSEG	
Common Bean	(1) --MYRAVTRNAVFLPRCRSLSHFHSFLPFISSLPSRFLRINGRVKNV	
Soybean	(1) --MYRVATRNAVFFPRCCSFAHYTPSLFPIFTSFAPSRLFLRINGCVKNV	
Rice	(1) MAIQRLLASSLVAATPRWLP-----VAADSLFLRRRHRPRCSPLPALLFNR	
Tomato	(1) --MYWVTAKNVVVSVPRWR-----SLSLFLRPPLRRRFLSFSPTHLC	
Consensus	(1) MYRV TRNVVVS PRWR F SSF F S PSR L ING V N	
	51	100
Arabidopsis	(46) ISCLRDGKSLKRITTASKKVKTSSDVLTDKDLSHLVWWKERLQTCKKPST	
Common Bean	(49) STYMDNNRVRSGSSRTKKPKVPNNVLDDKDLPHISWWKERLQMCKKFST	
Soybean	(49) PSYTDKKVS-RGSSRATKKPKI PNNVLDDKDLPHILWWKERLQMCRKFST	
Rice	(46) RSWSKPRKVSRSISIVSRKMNKQGDLNEGMLPHILWWKEKMERCRKPSS	
Tomato	(41) REQIRCVKERKFATTAKKLQPKSIPEEKDYVNIMWWKERMEFLRKPS	
Consensus	(51) SYIR K R S SKKLK P VLDDKDLPHILWWKERLQ CRKPST	
	101	150
Arabidopsis	(96) LQLIERLMLYTNLGLDPSLRNGSLKDGNLNWEMLQFKSRFPREVLLCRVG	
Common Bean	(99) VQLIQRLEFSNLLGLDSKLKNGSVKEGTLNWEMLQFKSKFPRQVLLCRVG	
Soybean	(98) VQLIERLEFSNLLGLNSNLKNGSLKEGTLNWEMLQFKSKFPRQVLLCRVG	
Rice	(96) MQLTQLVYNSNILGLDPTLRNGSLKDGSLNTEMLQFKSKFPRREVLLCRVG	
Tomato	(91) ALLAKRLTYCNLLGVDPSSLRNGSLKEGTLNSEMLQFKSKFPRREVLLCRVG	
Consensus	(101) VQLI RL YSNLLGLDPSLRNGSLKEGTLNWEMLQFKSKFPRREVLLCRVG	
	151	200
Arabidopsis	(146) EFYEAIgidACILVEYAGLNPFGLRSDSIPKAGCPIMNLRQTLLLTRN	
Common Bean	(149) EFYEAWGIDACVLVEYAGLNPCGLQSDSVPRA GCPVVNLRQTLLLTTN	
Soybean	(148) EFYEAWGIDACILVEYVGLNPIGGLRSDSIPRASC PVVNLRQTLLLTTN	
Rice	(146) DFYEAVGF DACILVEHAGLNPFGLRSDSIPKAGCPVMNLRQTLLLTRC	
Tomato	(141) DFYEAI GF DACILVEYAGLNPFGLHSDSIPKAGCPVVNLRQTLLLTRN	
Consensus	(151) EFYEAIgidACILVEYAGLNPFGLRSDSIPKAGCPVVNLRQTLLLTRN	
	201	250
Arabidopsis	(196) GYSVCIVEEVQGPTPARSRKGRFISGHAPGSPYVYGLGVVDHDDFPDP	
Common Bean	(199) GYSVCIIIEEVQGPTQARSRKRRFISGHAPGPNPYVYGLAAVDHDLFPEP	
Soybean	(198) GYSVCIVEEAQGQPSQARSRKRRFISGHAPGPNPYVYGLATVDHDLFPEP	
Rice	(196) GYSVCIVEEIQGPTQARARKGRFISGHAPGSPYVFGLAEVDHDVEFPDP	
Tomato	(191) GFSVCVVEEVQGPTQARARKSRFISGHAPGSPYVFGLVXDDQDFPEP	
Consensus	(201) GYSVCIVEEVQGPTQARSRK RFISGHAPGSPYVYGLA VDHDDLFPEP	
	251	300
Arabidopsis	(246) MPVVGISRSARGYCMISIFETMKAYS LDDGLTEEALVTKLRTRRCHHLFL	
Common Bean	(249) MPVIGISHSARGYCINMVLETMKTYSYEDCLTEEAI VTKLRTCQYHHFL	
Soybean	(248) MPVVGISHSARGYCINMVLETMKTYSSEDCLTEEAVVTKLRTCQYHYLFL	
Rice	(246) MPVVGISRSAGYCLISVLETMKTYS AEEGLTEEAVVTKLRICRYHHYL	
Tomato	(241) MPVVGISRSAGYCIISVYETMKTYSVEDGLTEEAVVTKLRTCRRCHFFL	
Consensus	(251) MPVVGISRSARGYCIISVLETMKTYS EDGLTEEAVVTKLRTCRRCHFFL	
	301	350
Arabidopsis	(296) HASLRHNASGT CRWGEFGEGGLLWGECSSRNFEWFEGDTLSELLSRVKDV	
Common Bean	(299) HTSLTQDSCGTSKWGEFGEGGLLWGECSSRHF EWFDGSPLS DLLVKVKE	
Soybean	(298) HTSLRRNNSCGTCNWGEFGEGGLLWGECSSRHFDWF DGNPVSDLLAKVKE	
Rice	(296) HSSLRNNSSGTSRWGEFGEGGLLWGECSGKS FEWF DGNPIEELLCKVREI	
Tomato	(291) HNSLKNNSSGTSRWGEFGEGGLLWGECSNARQQEWLDGNPIDELLFKVKE	
Consensus	(301) HTSLRNNSSGTSRWGEFGEGGLLWGECSSR FEWF DGNPISELL KVKE	
	351	400

Figure 3

Arabidopsis	(346) YGLDDEVSFRNVNVPSKNRPRPLHLGTATQIGALPTEGIPCLLKVLPPST	
Common Bean	(349) YGLDDEVTFRNTTVERSSRRARPLTLGTSTQIGAIHTEGIPSLLKVLLSPS	
Soybean	(348) YSIDDEVTFRNTTVERSSGRARPLTLGTSTQIGAIPTEGIPSLLKVLLPSN	
Rice	(346) YGLEEKTVFRNVSVSLEGRPQPLYLGTATQIGVIPTEGIPSLLKIVLPPN	
Tomato	(341) YGLNDDIPFRNVTVVSENRPRPLHLGTATQIGAIPTEGIPCLLKVLPPH	
Consensus	(351) YGLDDEVTFRNVTVSS RPRPLHLGTATQIGAIPTEGIPSLLKVLLPP 401	450
Arabidopsis	(396) CSGLPVLYVRDLNNPPAYDIALKIQETCKLMSTVTCASIPEFTCVSSAKL	
Common Bean	(399) CNGLPVLYIRNLLNPPSYEIASKIQETCKLMSSLTCASIPEFTCVSSAKL	
Soybean	(398) CNGLPVLYIRELLNPPSYEIASKIQATCKLMSSVTCASIPEFTCVSSAKL	
Rice	(396) FGGLPVLVYIRDLLNPPSFVDVASSVQEACRLMGSITCSIPEFTCIPAAKL	
Tomato	(391) CSGLPVLYIRDLLNPPAYEISSDIQEACRLMMSVTCSDPFTCISSAKL	
Consensus	(401) C GLPVLYIRDLLNPPSYEIASKIQETCKLMSSVTCASIPEFTCVSSAKL 451	500
Arabidopsis	(446) VKLLEQREANYIEFCRIKNVLDDVLHMHRHAELVEILKLLMDPTWVATGL	
Common Bean	(449) VKLLEWREVNHMEFCRIKNVLDEILHMYKTSELNEILKNLIDPTWATTGL	
Soybean	(448) VKLLEWREVNHMEFCRIKNVLDEILQMYSTSELNEILKHLIEPTWVATGL	
Rice	(446) VKLLESKEVNHIEFCRIKNVLDEVLFMGNSNAELSAILNKLLDPAAIVTGF	
Tomato	(441) VKLLELREANHVEFCKIKSMVEEILQLYRNSELRAIVELLMDPTWVATGL	
Consensus	(451) VKLLE REVNHIEFCRIKNVLDEIL MYR SEL EILK LIDPTWVATGL 501	550
Arabidopsis	(496) KIDFDLTVNECHWASDTIGEMISLDENESHQNVSCKCDNVPNEFFYDMESS	
Common Bean	(499) DIDFETLVSGCEVASSKISEIIISLDGGN-DQKINSLSIIPYEFFEDTESK	
Soybean	(498) EIDFETLVAGCEIASSKIGEIVSLDDEN-DQKINSFSFIPHEFFEDMESK	
Rice	(496) KVEADILVNECSFISQRIAEVISLGGES-DQAITSSEYIPKEFFNGMESS	
Tomato	(491) KVDFDTLVNECGKISCRISEIIISVHGEN-DQKISSYPIIPNDFFEDMELL	
Consensus	(501) KIDFDLTVNEC AS KISEIIISLDGEN DQKISS IP EFFEDMES 551	600
Arabidopsis	(546) WRGRVKGIHIEEEITQVEKSAEALSLAVAEDFHPIISRIKATTASLGGPK	
Common Bean	(548) WKGRIKRVHIDEVFTAQKAAEVLHIAVTEDFVPPVSRVKATIAPLGGPR	
Soybean	(547) WKGRIKRIHIDDVFTAVERKAAEVLHIAVTEDFVPPVSRKAIAPLGGPK	
Rice	(545) WKGRVKRVHAAEEFSNDIAAEALSTAVIEDFLPIISRVKSVMSSNGSSK	
Tomato	(540) WKGRVKRIHLEEAYAEVEKAADALS LAITEDFLPIISRIRATMAPLGGTK	
Consensus	(551) WKGRVKRIHIEE FT VEKAAEALSIAVTEDFLPIISRIKATMAPLGGPK 601	650
Arabidopsis	(596) GEIAYAREHESVFKGKRFTPSIWAGTAGEDQIKQLKPALDSKGKKVGEE	
Common Bean	(598) GEISYAREHEAVWFRGKRFTPSLWSGSPGEEQIKQLRHALDSKGKRVGEE	
Soybean	(597) GEISYAREQEAWFKGKRFTPNLWAGSPGEEQIKQLRHALDSKGKRVGEE	
Rice	(595) GEISYAKEHESVFKGRRFTPNVWANTPGELQIKQLPAIDSKGRKVGE	
Tomato	(590) GEILYAREHGAVWFKGKRFTVPTWAGTAGEEQIKQLRPALDSKGKKVGEE	
Consensus	(601) GEISYAREHEAVWFKGKRFTPSLWAGTPGEEQIKQLRPALDSKGKKVGEE 651	700
Arabidopsis	(646) WFTTPKVEIALVRYHEASENAKARVELLLRELSVKLQTKINVLVFASMLL	
Common Bean	(648) WFTTPKVEAALTRYHEANAKATERVLEILRELATELYSINILVFSSTLL	
Soybean	(647) WFTTPKVEAALTRYHEANAKAKERVLEILRGLAAELQYSINILVFSSTLL	
Rice	(645) WFTTIKVENALTRYHEADNAKRVLELLRGLSSELQDKINVLVFCSTML	
Tomato	(640) WFTTMRVEDAIIARYHEASARAKSRVLELLRGLSSELLSKINILIFASVLN	
Consensus	(651) WFTTPKVE ALTRYHEA AKAK RVLELLRGLSSELQ KINILVFASTML	

Figure 3 (cont'd)

		701	750
Arabidopsis	(696)	VISKALF SHA CEGR RR KWV FP TL VG FSL D EGA KPL DG AS RMK L TGL SPY W	
Common Bean	(698)	VITK ALFA HASEG RRR RWV FP TL AE SNG FED V KVSS DKI HGM KIV GLA PY W	
Soybean	(697)	VIAK ALFA HASEG RRR RWV FP TL VES HG FED V KSL DK THGM KIS GLL PY W	
Rice	(695)	IITK ALFG HVSE GR RR GW VL PT I SP -- LCKDN VTEE IS SEME LS GT FP Y W	
Tomato	(690)	VIAK SLF SHV SE GR RR NW IF PT IT QFN K CQ DTE ALN G TDGM KII IGL SPY W	
Consensus	(701)	VITK ALFA HASEG RRR RWV FP TL ED KSL D T GMK I SGL SPY W	
		751	800
Arabidopsis	(746)	FDVSS GT AVH NTVD M QSL FLLT GPNG GGK SLL RSIC AA ALLG I SGL M VP	
Common Bean	(748)	FHIA EG - IVR NDV DM QSL FLLT GPNG GGK SLL RSIC AA ALLG I CGL M VP	
Soybean	(747)	FHIA EG - VVR NDV DM QSL FLLT GPNG GGK SFL RSIC AA ALLG I CGL M VP	
Rice	(743)	LDTN QGNAIL N DVHM HSFL FILT GPNG GGK SSM RL RVCAA ALLG I CGL M VP	
Tomato	(740)	FDA ARG TGV QDTV DM QSM FLLT GPNG GGK SLL RSIC AA ALLG M CGF M VP	
Consensus	(751)	FDIA G AV NDV DM QSL FLLT GPNG GGK SLL RSIC AA ALLG I CGL M VP	
		801	850
Arabidopsis	(796)	AESACI PH FD SIM LHM KSYD SPV DGK SSF QVEM SEIR SI VS QAT SRSL VL	
Common Bean	(797)	AESAVI PY FD SIM LHM KSYD SPAD KK SSF QVEM SELRSI IGG TT KRS LVL	
Soybean	(796)	AESALI PY FD SIM LHM KSYD SPAD KK SSF QVEM SELRSI IGG TT NRSL VL	
Rice	(793)	AASAVI PH FD SIM LHM KAYD SPAD GK SSF QI EM SEIR SLV CRAT ARS LVL	
Tomato	(790)	AESAVI PH FD SIM LHM KSYD SPV DGK SSF QI EM SEIR SLIT GAT SRSL VL	
Consensus	(801)	AESAVI PH FD SIM LHM KSYD SPAD GK SSF QVEM SEIR SII GAT SRSL VL	
		851	900
Arabidopsis	(846)	IDEICRG TETAK GTC IAG SV VESL DT SG CL GIV STH LHG I FSL PLT AK NI	
Common Bean	(847)	VDEICRG TETAK GTC IAG SII ET LER I GCL GV VSTH LH GIFT LPL NIK ST	
Soybean	(846)	VDEICRG TETAK GTC IAG SII ET LD GIG CL GIV STH LH GIFT LPL NK NT	
Rice	(843)	IDEICRG TETAK GTC IAG SII ER LD NV GC IGI I STH LH GIFT DL PLS LH NT	
Tomato	(840)	IDEICRG TETAK GTC IAG SVI ET LDE I GCL GIV STH LH GIFT DL P LK IK KT	
Consensus	(851)	IDEICRG TETAK GTC IAG SII ET LD I GCL GIV STH LH GIFT LPL IK NT	
		901	950
Arabidopsis	(896)	TYKAM GAEN VEG QTK PTW KL TDG V CRES LAF ETAK REG V PES V IQRA EAL	
Common Bean	(897)	VHKAM GTT C IDG QIL PTW KL TDG V CRES LAF ETAK REG I PEPI I RR AE CL	
Soybean	(896)	VHKAM GTT S IDG QIM PTW KL TDG V CRES LAF ETAK REG I PEH I VR RA EYL	
Rice	(893)	DFKAM GTE II DRC I QPTW KL MDG IC RES LAF QTAR KE GMP DLI I RR AE EL	
Tomato	(890)	VYKAM GAE YV DG QP I PTW KL IDG IC KES LAF ET A QREG I PEI LI QRA EEL	
Consensus	(901)	VHKAM GTE IDG QI I PTW KL TDG V CRES LAF ETAK REG I PE I RR AE L	
		951	1000
Arabidopsis	(946)	YLSV YAK ----- DASA EVV KPD QI IT SSNN ----- DQQI QK PV	
Common Bean	(947)	YKSV YA ----- EENFP NEEKF STC NN LN NL NT SLY ----- SKGFLSGA	
Soybean	(946)	YQLV YAK EML FAEN FP NEEKF STC IN VNNL NG THL H ----- SKRFLSGA	
Rice	(943)	YLAM STN ----- SKHT SSAV HHE I SIAN STV NLS V EK PN YL R N GLE LQS	
Tomato	(940)	YNSAY GN QI PRK ID QIR PLR SDID LN STD NS S DQL N GTR QI AL DS ST KLM	
Consensus	(951)	Y SV YA EK S INI NL TT SL A	
		1001	1050
Arabidopsis	(979)	SSERS LEK DL AKA IV KIC GKK MIEP ----- EAIE CLS IGA REL PPP	
Common Bean	(986)	NQME GFR QEVER AIT V IC QDY I MER KNK KIA LE LPE I KCLL I GKR E QPPP	
Soybean	(990)	NQME VL RE EVER A V T V IC QD HIK DL KCK KIA LE LTE I KCL I IGT REL PPP	
Rice	(987)	GSF GLL RKE I E SV VT TIC KKL LD LY NKR S ISEL IE VVC V AVG ARE QPPP	
Tomato	(990)	HRM GI SS KKL ED AIC LICE EKK L I ELY KMKN PSE MP MV NC VL IA ARE QP AP	
Consensus	(1001)	M IL RK EL ERA IT V IC KK IEL KK EL EI CLL I GARE QPPP	
		1051	1100

Figure 3 (cont'd)

Arabidopsis	(1020)	STVGSSCVYVMRRPDKRLYIGQTDDLEGRIRAHRAKEGLQGSSFLYLMVQ
Common Bean	(1036)	SVVGSSSVYVIFTPDKKLYVGETDDLEGRVRRHRLKEGMDEASFLYFLVP
Soybean	(1040)	SVVGSSSVYVMFRPDKKLYVGETDDLEGRVRRHRLKEGMHDASFLYFLVP
Rice	(1037)	STVGRSSIYVIIRRDSKLYIGQTDDLVGRLSAHRSKEGMQDATILYILVP
Tomato	(1040)	STIGASSVYIMLRPDKKLYVGQTDLGRVRAHRLKEGMENASFLYFLVS
Consensus	(1051)	STVGSSSVYVM RPDKKLYVGQTDLGRVRAHRLKEGM DASFLYFLVP 1101 1150
Arabidopsis	(1070)	GKSMACQLETLLINQLHEQGYSLANLADGKHHRNFGTSSSLSTSDVVSIL-
Common Bean	(1086)	GKSLACQFESLLINQLSSQGFQLSNMADGKHHRNFGTSNLYA-----
Soybean	(1090)	GKSLACQFESLLINQLSGQGFQLSNIADGKHHRNFGTSNLYT-----
Rice	(1087)	GKSIACQLETLLINQLPLKGFKLINKADGKHHRNFGISLVPGEAIAA-----
Tomato	(1090)	GKSIACQLETLLINQLPNHGFQLTNVADGKHHRNFG-----
Consensus	(1101)	GKSIACQLETLLINQL QGFQLSNIADGKHHRNFGTS L

Arabidopsis	SEQ ID NO: 3
Common Bean	SEQ ID NO: 47
Soybean	SEQ ID NO: 31
Rice	SEQ ID NO: 22
Tomato	SEQ ID NO: 40
Consensus	SEQ ID NO: 65

Figure 3 (cont'd)